1339/1

# LOFTUS URBAN DISTRICT.

NORTH RIDING (GUISBOROUGH) COMBINED DISTRICTS.

# REPORT for the Year 1934

of the Medical Officer of Health, C. R. GIBSON, M.A., M.B., CH.B. D.P.H.

Guisborough:

Drinted by Stokeld & Sons, Fountain Street

1. Hog De note.



# To the Chairman and Members

OF THE

# Loftus Urban District Council.

Madam and Gentlemen.

I beg to submit my Annual Report for the year 1934, which has been drawn up on the lines indicated in the Ministry of Health's circular, 1417.

The year shows a decrease in the figures of the three rates: birth-rate, deathrate and infant mortality rate. These statistics will be found on page 5 and more fully in the table on page 17. Death-rates cannot be directly compared with any fairness between localities, because a more youthful population in one place favours a lower death-rate, or a more elderly population in another a higher death-rate, even if the relative healthiness of the districts were the same. The Registrar-General, however, furnishes this year a correcting factor, by the application of which the variation in age-constitution between districts is cancelled out and legitimate comparison can be made. Employing this factor the "comparable" death-rate for the year is found to be 11.7, that for the country as a whole being 11.8, so that for this year the district may be said to have been of the same healthiness as the country as a whole. In early childhood the year has been especially favourable for the district: the infant deaths, at the rate of 39½ per thousand births, have been the lowest recorded, and similarly the deaths of children over one year, but under five, have been very few. This is the more satisfactory, as the average of the previous five years, 1929 to 1933, had shown some increase in deaths at these ages over the preceding five years.

Infectious disease has been somewhat prevalent during the year, with a large number of cases of scarlet fever, a few sporadic cases of diphtheria, and two patients from one household with enteric fever (paratyphoid B). There was an absence of serious influenza.

The chief item of sanitary progress in the district during the year has been the issue of statutory notices under section 39 of the Public Health Acts (Amendment) Act, 1907, for the conversion to water-closets of the privies in Robinson Terrace and Park Terrace.

I am, Gentlemen,

Your obedient servant,

C. R. GIBSON,

Medical Officer of Health.

Guisborough, June 13th, 1935.

# 1. PUBLIC HEALTH OFFICERS.

a - Skelton & Brotton Urban District.			Mr. R. Barry	(Mr. A. Cranmer. additional Housing Inspector).
Saltburn and Marske-by-the-Sea Urban District.			Mr. T. Young	
Loftus Urban District.	Dr. C. R. Gibson	Dr. C. R. Gibson	Mr. P. H. Audsley to Nov. 13, 1934. Mr. A. Bates from Dec. 1, 1934.	
Guisborough Urban District.			Mr. R. H. Kilburn*	Mr. F. A. Russell
Borough of Redear.			Mr. W. Tutin	Mr. N. Hudson
	A. Whole-time Officers. Medical Officer of Health	Medical Officer to Joint Isolation Hospital	Sanitary Inspectors	Assis't Sanitary Inspectors

\*Also Surveyor for the district concerned.

# Statistics and Social Conditions of the Area.

Area (in acres) 10,595.

Registrar General's estimate of resident population, mid-1934: 8,010.

Number of inhabited houses on Rate-book, 1934: 2,008.

Rateable Value: .£23,587.

Sum represented by a penny rate: £87.

The Loftus Urban District is roughly a square area, with one side on the northeast coast, bordered on the west by the Skelton and Brotton Urban District, and on the east and south by the Whitby Rural District. The main industries are ironstone mining, iron and steel works, and agriculture.

## Extracts from Vital Statistics of 1934.

				Total.	Μ.		F.				
Live births,	legitin	rate		99	52		47	)	101 . (		
	illegiti	mate		2	1		1	,	Birth-r	ate 12	. 6.
Still-births				2	1		1	: Rate	e per 1,000 t	total b	irths, 19.
Deaths				85	44		41	: Deat	th-rate		10.6.
Deaths in c	onsequ	ence c	of child	-birth:							
						Deat	hs.	Rate	per 1,000 to	otal bi	rths.
	(a)	from	sepsis			()			0		
	(b)	from	other	causes		1			10		
	(c)	total				1			10		
Death-rate	of infai	its un	der on	e year o	f age:						
	All	infant	s, per	1,000 liv	e birth	8			$39\frac{1}{2}$		
	Leg	itimat	e infa	nts, per	1,000 1	egitii	mate li	ve bir	ths 40½		
	Hle	gitima	te infa	nts, per	1,000 il	legiti	mate li	ve bir	ths nil		
Deaths from	n Meas	les (al	l ages)				0				
••	Who	oping	Cough	(all age	es)		0				
.,	Diar	rhoea	(unde	r 2 year	rs of a	ge)	0				
	Influ	enza (	all age	es)			3				
**	Pneu	monia	e (all a	ges)			4				
				ages)			4				
	Cane	er (al	lages)				9				
1, .1				Hages)			16				

# General Provision of Health Services in the Area.

There have been no developments or changes in the services provided in the area during the year.

# Sanitary Circumstances of the Area.

Water: The quantity of supply has been generally satisfactory in the district throughout the year.

Complaints as to quality of the water were again received from Boulby village, where there were possibilities of contamination at the well, along the pipe line, and in the service reservoir. A sample from this supply was submitted for chemical analysis on 23rd April: the report was as follows:—

"The sample contained some brownish suspended matter, was alkaline to litmus when standing, and free from smell at 100 Fahr.

Analytical data.			Grain	s per gallon.
Total solids at 220 F.				21.5
Free and saline ammonia				0.0028
Albuminoid ammonia				0.0102
Nitrites		• • •		nil
Nitrates (as nitric anhydride)				0.30
Chlorides (as chlorine)				4.20
(equals sodium chlor	ine			6.92)
Oxygen absorbed in moist com	bustion	from N/80		
permanganate in 4	hours :	at 80 F.		0.056
Lead or Copper				nil
Hardness, stated as calcium ca	ırbonate	:		
Temporary				2.50
Permanent				5.25
Total		• • • •		7.75

The analytical data shew this water to be of doubtful purity and I do not consider it safe for drinking purposes.

(Signed) W. McD. MACKEY."

Comparison of this analysis with that of samples from similar wells in the Easington area given in last year's annual report confirm the suspicion of the impurity of this supply, and this water-supply must still be regarded as unsafe.

Closet Accommodation: 14 Pail-closets and 1 Privy were converted to water-closets during the year. Statutory notices to convert 15 privies in Robinson Terrace and Park Terrace were served but completion was delayed until after the end of the year owing to protracted negotiations for the laying of the necessary water-main.

At the end of 1934 the number of closets of each type is given as

Privies 363
Pail-closets 1046
Water-closets 473

Sanitary Inspection of the Area: The report furnished by the Sanitary Inspectors under Article 19 of the Sanitary Officers Order 1926, is given in Table 5.

Port Sanitary Report: The Skinningrove Iron Co, have a jetty at Skinningrove at which a few steamers call during the year to take on cargo. The following information concerning the character and amount of shipping and trade has been kindly supplied by the Skinningrove Iron Co.

I. Amount of shipping entering the Port during the year.

### Table A Number Inspected. Number of vessels Number By the reported as having, or By the reported Number Tonnage Médical having had, during Sanitary to be Officer the voyage infectious Defective Inspector of Health disease on board 12 6,000

II.—Character of Trade of Port.

### Table B.

- (a) Passenger Traffic during the year: nil.
- (b) Cargo Traffic: Imports, nil.

Total Foreign

Coastwise (Steamers)

Principal Exports, Pig Iron and Basic Slag.

(e) Foreign Ports from which vessels arrive: nil.

### III.—Source of Water Supply.

Water is obtained from the Cleveland Water Company.

### IV.—Port Sanitary Regulations, 1933

No Declarations of Health have been received, as there have been no ships arriving from a foreign port.

No notifications have been received of inward vessels requiring special attention.

The question of mooring stations was discussed with the Customs Officer some years ago, and his advice was that no safe mooring station was available in the area.

No arrangements have been made for premises for medical examination, cleansing and disinfection of ships, etc., premises for the temporary accommodation of persons, hospital accommodation for plague, cholera, or yellow fever, or for ambulance transport other than that available for the other needs of the district.

### Table C.

Cases of Infectious Disease landed from vessels: nil.

### l'able D.

Cases of Infectious Sickness occurring on vessels during the voyage but disposed of prior to arrival: nil.

V. Measures against Rodents.

Nil.

VI.—Hygiene of Crews' Spaces.

No nuisances reported.

VII.—Food Inspection.

No action has been required.

# Housing.

A tabulated statement of housing inspections and action taken is given in the appendix, page 16. The large number of houses inspected was in connection with surveys of the district for information on which to base recommendations for a five-year housing programme. My report to the Health Committee of the Council in December, 1934, dealt with this, and may be repeated here as containing my recommendations:—

"In July, 1933. I presented to you a Special Report on Housing under Ministry of Health Circular No. 1,331, making certain recommendations with regard to the Damside area, and in January. 1934, I made a Representation under Sect. 49 of the Housing Act, 1930, with respect to Forge Cottage, Scaling. This present report includes, extends and modifies these previous reports: it cannot be regarded as final, as a special survey of Skinningrove, Carlin How, Liverton and some smaller places has not yet been completed, but I do not anticipate that many more houses will fall to be dealt with.

I would recommend that fourteen houses be scheduled for demolition, eleven in small Clearance Areas, and three as individual unfit houses. The Clearance Areas are:—

- No. 1: Two adjoining cottages, occupied respectively by Mrs. Thomas Ward and by Mr. Thomas, and the old boathouse under that occupied by Mrs. Ward, situated at the foot of Cowbar Bank.
- No. 2: Two adjoining cottages, occupied respectively by Mr. William Porrit and by Mrs. Shorden, situated on Cowbar Bank.
- No. 3: 10, Church Row, Damside, Loftus, the adjoining building containing a wash-house and dairy, and the unoccupied building, 11, Church Row, lately inhabited as a dwelling-house.
- No. 4: Four cottages, 10, 9, 12 and 11, Damside, Loftus.
- No. 5: The cottage, 1, Dobson's Yard, Loftus, and adjoining derelict building to the north of it.

The individual unfit houses are:-

6, Damside, Loftus:7, Damside, Loftus; and Forge Cottage, Scaling. I would recommend that these fourteen houses be dealt with by you during the year 1935. I have already submitted a Representation regarding Forge Cottage. Scaling, and, in order that action by you may commence at once, I beg to submit Representations regarding the five Clearance Areas and the other two individual untit houses.

I would recommend that, after consideration of these Representations and any necessary decisions regarding re-housing, you pass resolutions declaring each of these areas to be a Clearance Area, and, in the case of the individual unfit houses, fix a time and place at which the question of their demolition will be considered by you, and direct that the necessary notice be given to owners, etc."

In the case of one of the individual unfit houses, the owner is carrying out extensive repairs and alterations to bring it up to a suitable degree of fitness.

# Inspection and Supervision of Food.

Milk Supply: A large amount of milk is produced in the district, the excess over what is consumed in the area is sent to other neighbouring districts or is manufactured into butter and cheese.

Three samples of milk were submitted to the Scarborough Public Health Laboratory for report as to total bacterial count and presence of coliform bacifli, i. e. as to cleanliness. In two samples coliform bacilli were not found in 1 100 c.c., and in one of these the total count was under 10,000 bacteria per c.c., in the other between 10,000 and 30,000 per c.c.; in the third sample coliform bacifli were found in 1 100 c.c. and the total bacterial count was between 30,000 and 200,000 per c.c. The first two reports indicate a satisfactory degree of cleanliness of the milk, the last one does not.

In view of the importance of maintaining a high standard of cleanliness of the milk-supply I would recommend the submission of a much greater number of samples for examination, not less than one during the year from each retailer or producer of milk. Out of 20 samples submitted in the last three years 10 were reported as containing coliform bacilli in 1 100 c.c., 7 had a total bacterial count of between 30,000 and 200,000 per c.c., and 2 a count of over 200,000; this is evidence of a low standard of cleanliness.

Meat and other Foods: Slaughterhouses are visited weekly by the Sanitary Inspector. The amount of unsound meat found has been very small during the year: one portion of carcase, weighing 16 stones, was surrendered.

# Prevalence of, and Control over, Infectious and other Diseases.

Scarlet fever has been more prevalent during the year, as in neighbouring districts also. The number of notified cases was 53, which is higher than in any year since 1928, and contrasts with the small number, 3, in 1933, which was the fewest recorded in any year so far back as 1889. The maximum in 1934 is not however the largest one; both in 1928 and 1927 there were 76 notified cases of scarlet fever, in 1912, 113, and in 1897

as many as 181. The clinical type of case was mild, with an absence of serious complications. The proportion of cases removed to hospital was very high, 47 of the patients being admitted to the Joint Hospital; this proportion has tended to increase for some years, e. g. between 1919 and 1922 38% of the notified cases were treated in hospital, between 1923 and 1927 55%, between 1928 and 1932 73%, and in 1933 and 1934 89%. Many of these cases thus admitted to hospital are comparatively trivial and could very well have been nursed at home, except for the difficulty of isolating them from other susceptible children in the house. Serum treatment is used in hospital for all but the mildest cases or those admitted late with a temperature normal or almost so; uncomplicated cases are discharged from hospital after a minimum isolation of 21 days and it is seldom that detention in hospital for as long as five or six weeks is required. In one of the two cases of puerperal fever, admitted to hospital with pronounced local and general signs of puerperal sepsis, a rash suggestive of scarlet fever was present on admission; she was discharged on recovery, after 23 days in hospital, and eight weeks later a child from the same house was notified to be suffering from scarlet fever.

The number of patients admitted to the Joint Isolation Hospital from this and other districts is given in the following table for the twelve months ended 31st March, 1935; the figures in brackets are the numbers admitted in the previous twelve months.

Joint Isolation Hospital.

Patients admitted April 1st, 1934, to March 31st, 1935.

	Redear Borough.	Guis- borough U.D.	Loftus U.D.	Saltburn and Marske.	Skelton and Brotton.	Total.
Scarlet Fever	65 (81)	74 (12)	44 (6)	26 (37)	81 (13)	290 (149)
Diphtheria	72 (15)	21 (31)	6 (4)	26 (3)	7 (1)	132 (54)
Enteric Fever		- (1)	2		1 (1)	3 (2)
Erysipelas	(1)		1	_	— (1)	1 (2)
Puerperal Fever	1 (2)		2 (1)	_		3 (3)
	138 (99)	95 (44)	55 (11)	52 (40)	89 (16)	429 (210)

The average number of patients admitted to fever hospital from these various districts over the five years 1928 to 1932 was 160: this last year has been exceptional, with a high incidence of scarlet fever and, at the same time, an epidemic of diphtheria of a severe type.

This district fortunately did not experience much diphtheria during the year, only six cases being notified, with no deaths. The clinical type, however, was severe. Diphtheria antitoxin is supplied free by the Council, but few cases admitted to hospital received serum prior to admission. No action to provide artificial immunization against diphtheria was taken during the year, but a scheme was adopted and authorised early in the current year and is now in operation. A case of enteric fever was notified and removed to the Joint Hospital on October 11th, the onset of the illness having been towards the end of September. The mother of the patient was admitted to hospital on October 20th, also suffering from enteric fever. Widal tests showed the type of infection to be Paratyphoid B. The source of infection in the first case was not discovered: the houses in the locality where it occurred are, however, furnished with dry closets, and at that time flies were plentiful, so that the presence of a carrier or mild case in the neighbourhood is only needed to supply an explanation. No further cases than these two were discovered.

The case of encephalitis lethargica (sleepy sickness) which figures in the notifications, was one of several years' standing, previously notified and now re-notified on admission to a Public Assistance Hospital.

The number of new cases of tuberculosis during the year was only five, the fewest in any year so far, but deaths from the disease do not show a corresponding diminution. Of the four deaths, three were of girls between the ages of 15 and 19; pulmonary tuberculosis (consumption) in young females is a common and very serious type of the disease in the district; many of the patients have been in domestic service in other parts of the country and return home with rapidly progressing disease. The four fatal cases had all previously been notified; the non-pulmonary case (meningitis) the day before death, while the intervals between notification and death in the three pulmonary cases were 39 days, 70 and 72 days respectively.

No action has been taken under section 66 of the Public Health Act, 1925, for the prevention of blindness or for the treatment of persons suffering from any disease or injury to the eyes.

No action was taken under section 62 of the Public Health Act, 1925: no tuberculous person employed in the milk trade was discovered, and no action was required under the Public Health (Prevention of Tuberculosis) Regulations, 1925.

APPENDIX.

3. NOTIFIABLE DISEASES (other than Tuberculosis), 1934.

																[
	1	All Ages	All Under tyear 2— Ages 1	l year	2—	3	1	ις.	10-	15—	25—	35	45	65	Cases admitted to Hosp. d	Total deaths
Smallpox	*				1											
Scarlet Fever	:	53	1	_	ಣ	-1,	4	20	<u>.c</u>	co	_				17	
Diphtheria		9					1		ᅻ′	61			-		9	
Enteric Fever	:	23								_	1	,	ſ		2	1
Puerperal Fever	:	61						1			_				61	
Puerperal Pyrexia	÷	61				1		1	+	П		-			1	
Pneumonia	:	24	61		_	61	61	ヺ	8	2	_	,—	=+	©1		7'
Erysipelas	:	10								green of		ග	5	7'	_	-
Enceph. Lethargica	:	-				Ì				1			_	1		
Ophth. Neonatorum		7	4		ij						1				1	
			To the second se	-												

4. TUBERCULOSIS.

			Vew	New Cases.			Dea	Deaths	
.\ge Periods.		Pulm	Pulmonary	Non-Pu	Non-Pulmonary	Pulm	Palmonary	Non Pulmonary	monary
		N.	<u> </u>	M.	<u>14.</u>	N.	Œ	ij	Œ
Under 1 year	:				1	1	-		
1—4 years	:		-	-				!	
ā—9 years	:			_	5	1	1	1	_
10—14 years	:		1			t t			- Anna Anna
15—19 years	:	1	1		_	1	co		
20-24 years	:								I
25—34 years	:				!		1	1	
35 44 years	:								
45—54 years	:		-			ı			-
55—64 years					†				
65 years and upwards	s.					-	(		l
				1	Ĭ	1			
All Ages	:		-	-	ಣ		က		-

None of the fatal cases unnotified.

5. ABSTRACT OF THE WORK OF THE SANITARY DEPARTMENT.

	Number dealt with.	Informal Notices.	Statutory Notices.	Result.	Remarks,	
Nuisances	929	138		Compliance		
Slaughterhouses	9	ıc	C	Compliance		
Dairies and Cowsheds	74	တ	C	Compliance		
Factories and Workshops	8	-	0	Compliance		
Offensive Trades	<b>x</b>		0	1	Fish-frying	
Common Lodging House	-		C	1		
Music Halls, Cinemas, etc	ļ	J	0	-		

6. LABORATORY EXAMINATIONS.

Total	78	C1 ++	314	118	280	136	co	77	
Skelton and Brotton Urban District.	4	ಣ	23	10	7	m	0	85	Yes
Saltburn and Marske-by the-Sea Urban District.	7	ıc	59	1.2	SS.	€.1	0	С	Yes
Loftus Urbun District.	7'	7	33	7-91	8			9	Yes
Guisborough Urban District.	16	ব	69	25	92	12	gunner	8	Yes
Borough of Redear.	20	∞	170	72	171	118	_	ଚୀ	Yes
	Souta examined for Tubercle bacilli		Swabs from Diphtheria suspects examined	Swabs from Diphtheria suspects found positive	Swabs from Diphtheria convalescents examined	Swabs from Diphtheria contacts	Blood examined for Enteric group (Widal Test)	()ther examinations	Diphtheria Antitoxin issued by Local Authority

\* Denotes one positive result.

# 7. HOUSING STATISTICS.

Ne	w He	ouses	s crect	ed in 1934:	By private By the Urb	enterprise an District Co	 ouncil	• • •	• • •	()
I.	Inspe	ection	ı of Dw	ellinghouses a	luring the year :					
	(1)	(a)				ses inspected	for housi	ng defects (	under	
		(b)			or Housing A					322
						for the purpo				485
	(2)	(a)	vv:la		spected and re	(included un ecorded under 	the Hous	sing Consol		_
		(h)		• /		for the purpos			* * *	
	(3)					nd to be in		en dangar		
	(0)					for human h				
	(4)	р	recedi		d) found not	elusive of the to be in all	respects i			74
	Dam					vice of formal n		* * *	• • •	, ,
2.			-					0		
	Nui					rendered fit i their officers		ience of int	ormal 	9
3.	Reme	edy u	ınder S	tatutory Pow	ers during the y	ear :				
	A.	Pro	oceedii	ngs under S	Sections 17, 18	and $\overset{\cdot}{23}$ , of th	e Housin	g Act, 1930	:	
		(1)		iber of dwe		in respect of			served 	2
		(2)	Num	ber of dwel	ling-houses re	endered fit afte	erservice	of formal no	otices:	
			( <i>a</i> ) ( <i>b</i> )	By owner By local a	rs nuthority in d	efault of owne	 ers		• • •	0
	В.	Pro	oceedii	ngs under I	Public Health	Acts:				
		(1)				n respect of v				()
		(2)	Num	ber of dw		in which def				
			(a)	By owner	·s			• • •		()
						efault of owne			• • •	0
	C.	Pro				121, Housing			o 4	
		(1)	we	re made		n respect of				()
		(2)	Num	her of dwel	ling-houses de	emolished in p	ursuance	of Demoliti	on Orders	()
	D.	$P_{\Gamma}$	oceedi	ngs under S	Section 20, of	the Housing	Act, 1930	:		
		(1)	Num	ber of sepa	rate tenemen Orders were	ts or undergr made	ound roo 	ms in resp 	ect of	()
		(2)	Num wh	ther of sepa	urate tencmen 3 Orders we	ts or undergi re determined 	d, the te	oms in response in	room	()

8. SUMMARY OF VITAL STATISTICS.

88       6,453       1172       505       161       62       36-4       157         93       6,208       1018       465       126       59       —       32·8       15·0         98       6,208       1018       465       126       59       —       32·8       15·0         98       6,200       989       440       135       60       —       32·1       14·2         03       6,508       1150       496       159       53       —       35·4       15·0         13       8,872       1465       600       172       72       45       33·0       13·5         18       8,700       1175       576       141       —       46       27·0       13·5         23       9,120       1148       481       93       47       39       25·2       10·6         28       8,342       78       461       38       18       19       16·4       11·7         29       8,342       78       461       38       18       19       16·4       11·7         28       8,342       78       461       38       18       19·6	Period.	Population.	Births	Deaths.	Deaths at Ages	at Ages	Deaths from all	Yearly Dines	Vearly	Infant Mortality Rate
1888         6,453         1172         505         161         62         36·4         15·7           1893         6.208         1018         465         126         59         —         32·8         15·0           1898         6.208         1018         465         126         59         —         32·8         15·0           1903         6.208         1150         496         159         60         —         32·1         14·2           1908         6.508         1150         496         159         53         —         35·4         14·2           1918         8.872         1465         600         172         72         45         33·0         13·4           1918         8.700         1175         576         141         —         46         27·0         13·3           1928         8,342         782         45         39         25·2         10·6           1933         7.897         648         461         38         18         19         16·1         11·5           33         8.116         126         93         5         15·5         11·5         11·5           <		.			Under 1 year.	1-4 years.	Tuberen Iosis	rate.	rate.	Infant deaths per thousand births).
1893         6.208         1018         465         126         59         —         32·8         15·0           1898         6,200         989         440         185         60         —         32·1         14·2           1903         6,508         1150         496         159         53         —         35·4         15·2           1908         7,600         1310         54.7         161         60         45         34·5         14·4           1918         8,700         1175         576         141         —         46         27·0         13·5           1923         8,120         1148         481         93         47         39         25·2         10·6           1928         8,342         782         48         48         48         47         39         25·2         10·6           1938         7,897         648         461         38         18         16·4         11·6           8         116         126         3         5         15·5         11·6           8         116         126         4         12·6         11·6	1884—1888	6,453	1172	505	161	69		36.4	15.7	137
1898         6,200         989         440         135         60         —         32·1         14·2           1903         6.508         1150         496         159         53         —         35·4         15·2           1908         7,600         1310         54.7         161         60         45         34·5         14·4           1913         8,872         1465         600         172         72         46         37·0         13·5           1918         8,700         1175         576         141         —         46         27·0         13·5           1923         9,120         1148         481         93         47         39         25·2         10·6           1928         8,342         782         45         17         28         18·8         11·0           1933         7.897         648         461         38         18         16·4         11·7           33         8.116         126         33         5         15·5         11·5           34         8,010         101         85         4         2         4         12·6         10·6	18891893	6.208	1018	465	126	59		32.8	15.0	124
1903         6.508         1150         496         159         53         —         35·4         15·2           1908         7,600         1310         547         161         60         45         34·5         14·4           1913         8,872         1465         600         172         72         45         33·0         13·5           1918         8,700         1175         576         141         —         46         27·0         13·3           -1923         9,120         1148         481         93         47         39         25·2         10·6           -1928         8,342         782         43         17         28         18·8         11·0           -1933         7.897         648         461         38         18         16·4         11·7           33         8.116         126         93         5         3         5         15·5         11·5           34         8,010         101         85         4         2         4         12·6         10·6	1894 1898	6,200	686	0++	135	09		32.1	14.2	136
1908         7,600         1310         547         161         60         45         34·5         14·4           1913         8,872         1465         600         172         72         45         33·0         13·5           1918         8,700         1175         576         141         —         46         27·0         13·5           -1923         9,120         1148         481         93         47         39         25·2         10·6           -1928         8,342         782         43         17         28         18·8         11·0           -1933         7.897         648         461         38         18         16·1         11·7           33         8.116         126         93         5         3         5         15·5         11·5           34         8,010         101         85         4         2         4         12·6         10·6	1899—1903	6.508	1150	96†	159	35	ŀ	35.4	15.2	138
8,872       1465       600       172       72       45       33·0       13·5         8,700       1175       576       141       —       46       27·0       13·3         9,120       1148       481       93       47       39       25·2       10·6         8,342       782       45       43       17       28       18·8       11·0         7.897       648       461       38       18       16·4       11·7         8,116       126       93       5       15·5       11·5         8,010       101       85       4       2       4       12·6       10·6		7,600	1310	247	161	60	45	34.5	<del>+</del> <del>+</del> <del>-</del>	123
1918         8,700         1175         576         141         —         46         27·0         13·3           -1923         9,120         1148         481         93         47         39         25·2         10·6           -1928         8,342         782         458         43         17         28         18·8         11·0           -1933         7.897         648         461         38         18         16·4         11·7           33         8.116         126         93         5         3         5         15·5         11·5           34         8,010         101         85         4         2         4         12·6         10·6	1909 1913	8,872	1465	009	172	7.2	4	33.0	13.5	117
9,120       1148       481       93       47       39       25·2       10·6         8,342       782       458       43       17       28       18·8       11·0         7.897       648       461       38       18       19       16·4       11·7         8.116       126       93       5       3       5       15·5       11·5         8,010       101       85       4       2       4       12·6       10·6		8,700	1175	576	1+1	1	46	27.0	13.3	120
8,342       782       458       43       17       28       18·8       11·0         7.897       648       461       38       18       19       16·4       11·7         8.116       126       93       5       3       5       15·5       11·5         8,010       101       85       4       2       4       12·6       10·6	1919 - 1923	9,120	1148	481	တ္သ	7	39	25.5	9.01	<u>~</u>
7.897         648         461         38         18         19         16·4         11·7           8.116         126         93         5         3         5         15·5         11·5           8,010         101         85         4         2         4         12·6         10·6	19241928	8,342	785	458	т ::	17	28	18.8	11.0	16
8.116     126     93     5     3     5     15·5     11·5       8,010     101     85     4     2     4     12·6     10·6	1929—1933	7.897	648	461	38	<u>~</u>	19	16.4	11.7	66
8,010 101 85 4 2 4 12.6 10.6	1933	8.116	126	66	10,	20	10	ونوا	10	0+
	1934	8,010	101	χ (C	7	<b>©</b> 1		15.6	9.01	0.50





